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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
08/581,347	12/29/95	CLEEVES	J 16820.P121

HM22/0120
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EXAMINER

RYAN, V
ART UNIT PAPER NUMBER

1641

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DATE MAILED: 01/20/99

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

- ☒ Responsive to communication(s) filed on November 6, 1998
- ☒ This action is FINAL.

- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1-20 is/are pending in the application.
Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-20 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of Reference Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

-SEE OFFICE ACTION ON THE FOLLOWING PAGES-

Art Unit: 1641

DETAILED ACTION

The Group and/or Art Unit location of your application in the Patent and Trademark Office has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1641.

The text of those sections of U.S. Code not included in this Office Action can be found in a prior Office Action.

The Examiner acknowledges receipt of the amendment filed November 6, 1998.

In this application:

Claims 1 and 14 were amended.

Claims 1-20 are pending and under examination.

Response to Amendment

The corrected or substitute drawings were received on November 6, 1998. These drawings are acceptable.

Applicant's arguments filed November 6, 1998 have been fully and carefully considered and they are not deemed to be persuasive regarding those rejections which are maintained.

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(1) The rejection of claims 1-20 under 35 U.S.C. 102(b) as being anticipated by Cathey, Jr is maintained.

Applicant submits that Cathey, Jr discloses the use of O-ring seals between the wafer and electrode. However, Applicant asserts that the reference does not provide any discussion or suggestion of any heat transferring properties of the seal. Moreover, Applicant contends that Cathey, Jr does not appreciate the heat transfer properties of the O-rings, and instead relies on the heat transfer properties of the gas introduced into the void between the wafer and the supporting electrode.

However, the specification describes the heat transferring seal as an annular body having two surfaces with an inner peripheral portion for receiving gas. The seal is made of a material having thermal conductivity closely matched with the thermal conductivity of the gas. (See page 7, line 13 - page 8, line 2). The O-ring disclosed in the Cathey reference has the surfaces recited in the claims and an inner peripheral portion for receiving gas.

The specification also teaches that the heat transferring seal can be made of Kapton[™]. However, Long et al US Patent 5,173,766 (See column 29, lines 50-51), Salfelder et al US Patent 5,636,098 (See column 8, lines 34-35) or Shamouilian et al US

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Patent 5,753,132 teach that Kapton[™] is an insulator. Therefore, Applicant's arguments pertaining to the heat transferring property of the heat transferring seal is not persuasive.

Applicant has amended the claim to recite that "the relation between the first thermal conductivity and the second thermal conductivity being such that heat transfer between said holding body and the substrate is substantially uniform". The specification teaches that the relation between the thermal conductivities (i.e., the gas and the heat transferring seal) is determined by several factors such as the distance between the holding body and the substrate. The heat transfer is also proportional to the thermal conductivity of the object which transfers the heat and also to the cross-section of the heat transfer path. Therefore, the disclosure of Cathey, Jr anticipates the claimed invention with the heat transfer property being inherent, absent evidence to the contrary or unexpected results.

(2) The objection to the drawings for failing to comply with 37 CFR 1.84(p)(5) is withdrawn in view of the amendment to the specification and drawings.

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(3) The rejection of claims 1-20 under 35 U.S.C. 112, first paragraph is withdrawn.

(4) The rejection of claims 1-20 under 35 U.S.C. 112, second paragraph is withdrawn. The Examiner notes the typographical error in the Office Action of August 4, 1998 (page 5, line 13) where the rejection is indicated to be claims 1-21.

The following are new grounds of rejections necessitated by Applicant's amendment:

Claim Rejections - 35 USC § 112

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 14 are indefinite in the recitation of "substantially uniform". It is not clear what is encompassed by the term and it is not further defined in the specification.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Long et al (US Patent #5,173,766)
2. Salfelder et al (US Patent #5,636,098)

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3. Shamouilian et al (US Patent #5,753,132)

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to V. Ryan whose telephone number is (703)305-6558.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)308-0196.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel, can be reached on (703) 308-4027.

Papers related to this application may be submitted to the Group 1600 by facsimile transmission. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The fax number for Art Unit 1641 is (703)308-4242.

V. Ryan
Patent Examiner/Art Unit 1641
January 1999
Ryan/vr


JAMES C. HOUSEL 1/18/99
SUPERVISORY PATENT EXAMINER